## THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 16

# UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

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Ex parte BRUNO DRIESKENS and BERNARD HAVEAUX

Application 08/210,217

ON BRIEF

Before KIMLIN, PAK and ELLIS, Administrative Patent Judges.

ELLIS, Administrative Patent Judge.

### **DECISION ON APPEAL**

This is an appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 1, 2 and 4 through 10. Claims 3 and 11 have been withdrawn from consideration by the examiner. Claims 1, 6 and 7 are illustrative of the subject matter on appeal and read as follows:

1. A bituminous cold-application self-adhesive composition characterized in comprising a mixture of:

5 to 25% of a styrene-diene rubbery polymer mixture that comprises

- (A) one radial styrene-butadiene block copolymer;
- (B) at least one styrene-isoprene block copolymer selected from the group consisting of linear and radial copolymers; and
  - (C) one styrene-diene di-block copolymer;

0 to 25% of at least one tackifying resin; and,

5 to 95% bitumen.

- 6. The composition of claim 1 characterized in that copolymer (C) comprises a styrene di-block copolymer in which the styrene portion represents from 15 to 45 weight percent and whose total molecular weight is between 50,000 and 150,000.
- 7. The composition of claim 6 characterized in that copolymer (C) is of statistical interlinking, containing one styrene block and one styrene-butadiene block in a statistical distribution.

The references relied upon by the examiner are:

| Barlow                 | 4,464,427 | Aug. 7, 1984          |
|------------------------|-----------|-----------------------|
| Algrim et al. (Algrim) | 4,824,880 | Apr. 25, 1989         |
| Mitchell               | 5,182,319 | Jan. 26, 1993         |
|                        |           | (filed Sep. 27, 1991) |

The claims stand rejected as follows:

- I. Claim 7 stands rejected under 35 U.S.C. § 112, second paragraph, as being indefinite in the recitation of "statistical interlinking."
- II. Claims 1, 2 and 4 through 10 stand rejected under 35 U.S.C. § 103 as being unpatentable over Mitchell in view of Barlow.
- III. Claims 1, 2 and 4 through 10 stand rejected under 35 U.S.C. § 103 as being unpatentable over Algrim in view of Barlow.

We reverse.

#### **Discussion**

I.

The examiner argues that the phrase "statistical interlinking" in claim 7 is indefinite as "it is not understood how two blocks can be interlinked in a statistical way." Answer, p.

3. According to the examiner, "statistical' refers to s [sic, a] large number of units and never only two blocks." *Id.* We find this argument unconvincing.

As we understand the examiner's position, it is that he believes that the specification definition is inconsistent with the art recognized meaning of the term "statistical." That is, the examiner believes that those of ordinary skill in this art would understand "statistical" as referring to more than two blocks. We point out that, in general,

those of ordinary skill in the art unless it is apparent from the specification and/or the prosecution history that the inventor used the term with a different meaning. *Intellical, Inc.* v. Phonometrics, Inc., 952 F.2d 1384, 1387, 21 USPQ2d 1383, 1386 (Fed. Cir. 1992); Phillips Petroleum Co. v. Huntsman **Polymers Corp.**, 157 F.3d 866, 871, 48 USPQ2d 1161, 1165 (Fed. Cir.1998); **Hoechst** Celanese Corp. v. BP Chem. Ltd., 78 F.3d 1575, 1578, 38 USPQ2d 1126, 1129 (Fed. Cir. 1996). Thus, an applicant can be his own lexicographer and define unfamiliar terms in the specification. Locite Corp. v. Ultraseal Ltd., 781 F.2d 861, 867, 228 USPQ 90, 93 (Fed. Cir. 1985); Autogiro Co. of America v. United States, 384 F.2d 391, 397, 155 USPQ 697, 702 (CT. Cl. 1967). Here, the examiner has not provided any additional evidence, such as a dictionary definition, to establish the ordinary meaning of the term "statistical." Thus, to ascertain the meaning of the disputed term in this case, we must turn to the specification for guidance. In so doing, we find that the appellants have provided a definition of "statistical interlinking." That is, the appellants point to p. 6, lines 8-10 of the specification which states () "... copolymer (C) used in the present invention is of the type utilizing statistical interlinking which means that it contains one styrene block and one styrene-butadiene block in a statistical distribution. Generally, the styrene block represents

technical terms in a claim are given their ordinary meaning as would have been given by

about 70% of the total styrene." Thus, since the specification provides a definition of

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"statistical interlinking," and the examiner has not provided any evidence that those skilled in the art would not agree with this definition, the rejection is reversed.

II.

The examiner has premised his initial conclusion of obviousness on the teachings of Mitchell and Barlow. According to the examiner

Mitchell discloses adhesive compositions comprising bitumen and two different block copolymers one of which is a tri-block of the A-B-A structure and the other is a di-clock [sic, di-block] copolymer of the A-B structure. Among suitable A-B-A block copolymers the patentee lists styrene-isoprene-styrene block copolymer via reference to the U.S. 3,978,014 (see col. 3, ln[.] 11-12 of Mitchell and col. 2, ln. 58-66 of 3,978,014). . . . The second copolymer, i.e.[,] the styrenebutadiene di-block copolymer disclosed by the patentee completely corresponds to the claimed di-block, and is defined as a copolymer having one styrene block and one elastomeric block that is prepared by copolymerization of a conjugated diene with an vinyl aromatic compound. Specifically claimed random styrene-butadiene elastomeric block would have been obvious from this definition since the genus of random diene-vinyl aromatic copolymers is very small and virtually limited to the styrene ( -methyl styrene)-butadiene or styrene (-methyl styrene) - isoprene copolymers, where styrenebutadiene copolymers are the most conventional copolymers. Addition of a star styrene-butadiene (isoprene) block copolymers to the bituminous compositions disclosed by Mitchell would have been obvious as per [the] teachings of Barlow. Barlow discloses that compositions containing [a] combination of styrene-butadiene starblock copolymers and linear styrene-isoprene block copolymers exhibit improved properties in bituminous compositions compared to compositions containing either radial or linear copolymer [sic, copolymers]. . . . It would, therefore, have been obvious to add radial

styrene butadiene copolymer to bituminous compositions disclosed by Mitchell which contain predominant amount of linear styreneisoprene-styrene polymeric component with reasonable expectation of improvement of visco-elastic characteristic of the resulting mixture [Answer, pp. 4-5].

We find this position lacks merit.

From our reading of the applied prior art, we find that the examiner has erred on two important points in his analysis. First, we do not find that Mitchell lists styrene-isoprene-styrene block copolymers via reference to U.S. 3,978,014 as stated in the rejection.

Rather, Mitchell specifies that the A-B-A type block copolymers of the invention described therein consist of styrene-butadiene-styrene block copolymers. Mitchell, col. 3, lines 25-33. Nor do we find that the section of the 3,978,014 relied on by the examiner teaches that the A-B-A type block copolymers disclosed therein are styrene-isoprene-styrene block copolymers. Thus, component (B) of the claims (see, e.g., claim 1) is not taught or suggested by Mitchell. Since the primary reference does not disclose all the claimed components as alleged by the examiner, the rejection is fatally defective from the outset.

This defect notwithstanding, we feel compelled (because it is an important point with respect to Rejection III discussed below) also to point out that we disagree with the

examiner's interpretation of Barlow. Barlow discloses that

The use of both a linear and a radial block copolymer results in

improved properties for the mixture compared to the use of just a linear copolymer or just a radial copolymer. In particular, the radial copolymers give superior visco-elastic properties [Barlow, col. 2, lines 39-43].

However, the radial copolymers to which Barlow is referring, and which are said to give the superior properties, are not styrene-diene di-block copolymers (component (C)) and radial styriene-butadiene block copolymers (component (A)) as required by the claims but, rather, they are polystyrene-polyisoprene-polystyrene tri-block copolymers. Thus, at best, Barlow suggests that the use of radial styrene-isoprene tri-block copolymers (claim component (B)) give superior properties in an adhesive. Contrary to the examiner's argument, we do not find that Barlow teaches or suggests the claimed composition which requires a polymer mixture comprising (i) a *radial* styrene-butadiene block copolymer, (ii) a styrene-isoprene block copolymer selected from the group consisting of linear and radial copolymers, and (iii) a styrene-diene di-block copolymer. Accordingly, the rejection is reversed.

III.

The examiner contends that the claimed invention would have been obvious to one of ordinary skill in the art in view of the teachings of Algrim and Barlow. Algrim discloses an asphalt-based adhesive which comprises linear tri-block copolymers such as styrene-

butadiene-styrene, styrene-isoprene-styrene, and styrene-ethylene-butylene-styrene.

Algrim, col. 3, lines 29-38. Preferred is a composition comprising about 80% styrene-butadiene-styrene and about 20% styrene-butadiene di-block copolymer. *Id.*, lines 38-50.

According to the examiner the "[a]ddition of a radial copolymer to the composition containing [a] predominant amount of linear copolymers, i.e.[,] substitution of a linear styrene-isoprene copolymer with [a] combination of radial a styrene butadiene and linear styrene isoprene copolymer [sic, copolymers] would have been obvious from the teachings of Barlow as per discussions . . . regarding [the] rejection over Mitchell." Answer, p. 6.

We cannot sustain this rejection.

Here, we agree that Algrim discloses a composition comprising a linear styrene-butadiene di-block copolymer (component (C)) and a linear styrene isoprene copolymer (component (B)). However, Algrim lacks a teaching or suggestion of a composition comprising radial styrene-butadiene block copolymers (component (A)) as required by the claims. See claim 1. As we discussed above, we do not find that Barlow teaches or suggests a composition comprising radial styrene-butadiene block copolymers, in combination with a linear and/or radial styrene-isoprene triblock copolymer, and a linear styrene-diene di-block copolymer. Accordingly, the rejection is reversed.

The decision of the examiner is reversed.

### REVERSED

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Edward C. Kimlin )
Administrative Patent Judge )
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Chung K. Pak ) BOARD OF PATENT
Administrative Patent Judge ) APPEALS AND
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